

IN THE CLAIMS:

1. (Currently Amended) A method of executing a hardware dump, comprising:
identifying a set of hardware dump information elements to collect, wherein
identifying a set of hardware dump information elements comprises determining a dump
mode and identifying a set of static arrays;
calculating an amount of memory to allocate for a dump list based on the
~~identified set of hardware dump information elements~~ dump mode and sizes of the set of
static arrays;
allocating the calculated amount of memory; and
building the dump list in the allocated memory.
2. (Original) The method of claim 1, further comprising:
collecting the hardware dump information elements; and
saving the collected hardware dump information elements in memory.
3. (Canceled).
4. (Currently Amended) The method of claim ~~[[3]]~~ 1, wherein the ~~step of~~
~~identifying a set of hardware dump information elements comprises identifying~~ set of
static arrays is a complete set of static arrays if the dump mode is a complete dump.
5. (Currently Amended) The method of claim ~~[[3]]~~ 1, wherein the ~~step of~~
~~identifying a set of hardware dump information elements comprises identifying~~ set of
static arrays is a subset of static arrays if the dump mode is an abbreviated dump.
6. (Currently Amended) The method of claim ~~[[1]]~~ 2, wherein the step of
~~identifying a set of hardware dump information elements comprises identifying a set of~~
~~static arrays~~ building the dump list comprises iterating through the set of static arrays.

7. (Currently Amended) The method of claim [[6]] 1, wherein the set of static arrays comprises a component static array for each component to be scanned.
8. (Original) The method of claim 7, wherein each component static array comprises a set of constants, each constant representing a hardware dump information element to be collected.
9. (Currently Amended) The method of claim [[1]] 2, wherein the collecting step of building the dump list based on the set of hardware dump information elements comprises collecting hardware dump data for each entry of the dump list from each component to be scanned.
10. (Currently Amended) The method of claim 1, wherein the hardware dump information elements comprises at least one of a scan ring, a trace array, cache contents, and cache directory contents.
11. (Currently Amended) An apparatus for executing a hardware dump, comprising:
a memory; and
a processor, coupled to the memory, wherein the processor identifies a set of hardware dump information elements to collect; calculates an amount of memory to allocate for a dump list based on the identified set of hardware dump information elements; allocates a portion of the memory corresponding to the calculated amount; and builds the dump list in the allocated portion of the memory, wherein the processor identifies the set of hardware dump information elements by determining a dump mode and identifying a set of static arrays, and wherein the processor calculates the amount of memory to allocate is calculated based on the dump mode and sizes of the set of static arrays.
12. (Original) The apparatus of claim 11, wherein the processor further collects the hardware dump information elements; and saves the collected hardware dump information elements in the memory.

13. (Canceled).

14. (Currently Amended) The apparatus of claim [[13]] 11, wherein the processor identifies a complete set of static arrays if the dump mode is a complete dump and identifies the set of hardware dump information elements using the complete set of static arrays.

15. (Currently Amended) The apparatus of claim [[13]] 11, wherein the processor identifies a subset of static arrays if the dump mode is an abbreviated dump and identifies the set of hardware dump information elements using the subset of static arrays.

16. (Currently Amended) The apparatus of claim 11, wherein the processor ~~identifies a set of static arrays and identifies the set of hardware dump information elements using the set of static arrays~~ builds the dump list by iterating through the set of static arrays.

17. (Currently Amended) The apparatus of claim [[16]] 11, wherein the set of static arrays comprises a component static array for each component to be scanned.

18. (Original) The apparatus of claim 17, wherein each component static array comprises a set of constants, each constant representing a hardware dump information element to be collected.

19. (Currently Amended) The apparatus of claim [[11]] 12, wherein the processor ~~builds the dump list based on the set of hardware dump information elements~~ collects the hardware dump information elements by collecting hardware dump data for each entry of the dump list from each component to be scanned.

20. (Currently Amended) The apparatus of claim 11, wherein the hardware dump information elements comprises at least one of a scan ring, a trace array, cache contents, and cache directory contents.

21. (Currently Amended) A computer program product, in a computer readable medium, for executing a hardware dump, comprising:

instructions for identifying a set of hardware dump information elements to collect, wherein instructions for identifying a set of hardware dump information elements comprises instructions for determining a dump mode and identifying a set of static arrays;

instructions for calculating an amount of memory to allocate for a dump list based on the ~~identified set of hardware dump information elements~~ dump mode and sizes of the set of static arrays;

instructions for allocating the calculated amount of memory; and

instructions for building the dump list in the allocated memory.